

Ligation

1. Use NEBioCalculator to establish a 5:1 molar:insert vector ratio with a vector DNA mass of 20ng.
2. Give a quick spin to the digestions and the ligase.
3. Place all the required reagents on ice.
4. Add 20ng (2 μ L) of destination plasmid digestion to a PCR tube.
5. Add the calculated volume of upstream part digestion and downstream part digestion to the reaction.
6. Add 2 μ L of 10X T4 DNA Ligase Buffer and 1 μ L of T4 DNA Ligase.
7. Bring volume up to 20 μ L with nuclease free water.
8. Incubate at room temperature overnight.
9. Heat inactivate at 80°C for 20 minutes.